



FLWEMS Paramedic Medication Information For:

ATROPINE SULFATE

(*Atropair*)

(AH-troh-peen)

Pregnancy Category

C Atropair Atropine-1 Ophthalmic Atropine Sulfate Ophthalmic Atropine-Care Ophthalmic Atropisol
Ophthalmic Isopto Atropine Ophthalmic Minims Atropine* (Rx)

Classification

Cholinergic blocking agent

See Also

See also *Cholinergic Blocking Agents*.

Action/Kinetics

Atropine blocks the action of acetylcholine on postganglionic cholinergic receptors in smooth muscle, cardiac muscle, exocrine glands, urinary bladder, and the AV and SA nodes in the heart. Ophthalmologically, atropine blocks the effect of acetylcholine on the sphincter muscle of the iris and the accommodative muscle of the ciliary body. This results in dilation of the pupil (mydriasis) and paralysis of the muscles required to accommodate for close vision (cycloplegia). Peak effect: *Mydriasis* 30-40 min; *cycloplegia* 1-3 hr. Recovery: Up to 12 days. Duration, PO: 4-6 hr. $t_{1/2}$: 2.5 hr. Metabolized by the liver although 30%-50% is excreted through the kidneys unchanged.

Uses

PO: Adjunct in peptic ulcer treatment. Irritable bowel syndrome. Adjunct in treatment of spastic disorders of the biliary tract. Urologic disorders, urinary incontinence. During anesthesia to control salivation and bronchial secretions. Has been used for parkinsonism but more effective drugs are available.

Parenteral

Antiarrhythmic, adjunct in GI radiography. Prophylaxis of arrhythmias induced by succinylcholine or surgical procedures. Reduce sinus bradycardia (severe) and syncope in hyperactive carotid sinus reflex. Prophylaxis and treatment of toxicity due to cholinesterase inhibitors, including organophosphate pesticides. Treatment of curariform block. As a preanesthetic or in dentistry to decrease secretions.

Ophthalmologic

Cycloplegic refraction or pupillary dilation in acute inflammatory conditions of the iris and uveal tract. *Investigational*: Treatment and prophylaxis of posterior synechiae; pre- and postoperative mydriasis; treatment of malignant glaucoma.

Additional Contraindications

Ophthalmic use: Infants less than 3 months of age, primary glaucoma or a tendency toward glaucoma, adhesions between the iris and the lens, geriatric clients and others where undiagnosed glaucoma or excessive pressure in the eye may be present, in children who have had a previous severe systemic reaction to atropine.

Special Concerns

Use with caution in infants, small children, geriatric clients, diabetes, hypo- or hyperthyroidism, narrow anterior chamber angle, individuals with Down syndrome.

Additional Side Effects

Ophthalmologic: Blurred vision, stinging, increased intraocular pressure, contact dermatitis. Long-term use may cause irritation, photophobia, eczematoid dermatitis, conjunctivitis, hyperemia, or edema.

Overdose Management

Treatment of Ocular Overdose: Eyes should be flushed with water or normal saline. A topical miotic may be necessary.

ATROPINE SULFATE

(Atropair)

How Supplied

Injection: 0.05 mg/mL, 0.1 mg/mL, 0.4 mg/mL, 0.5 mg/mL, 0.8 mg/mL, 1 mg/mL; *Ophthalmic Ointment:* 1%; *Ophthalmic Solution:* 0.5%, 1%; *Tablet:* 0.4 mg

Dosage

•**Tablets Anticholinergic or antispasmodic.**

Adults: 0.3-1.2 mg q 4-6 hr. Pediatric, over 41 kg: same as adult; 29.5-41 kg: 0.4 mg q 4-6 hr; 18.2-29.5 kg: 0.3 mg q 4-6 hr; 10.9-18.2 kg: 0.2 mg q 4-6 hr; 7.3-10.9 kg: 0.15 mg q 4-6 hr; 3.2-7.3 kg: 0.1 mg q 4-6 hr.

Prophylaxis of respiratory tract secretions and excess salivation during anesthesia.

Adults: 2 mg.

Parkinsonism.

Adults: 0.1-0.25 mg q.i.d.

•**IM, IV, SC Anticholinergic.**

Adults, IM, IV, SC: 0.4-0.6 mg q 4-6 hr. Pediatric, SC: 0.01 mg/kg, not to exceed 0.4 mg (or 0.3 mg/m²).

To reverse curariform blockade.

Adults, IV: 0.6-1.2 mg given at the same time or a few minutes before 0.5-2 mg neostigmine methylsulfate (use separate syringes).

Treatment of toxicity from cholinesterase inhibitors.

Adults, IV, initial: 2-4 mg; then, 2 mg repeated q 5-10 min until muscarinic symptoms disappear and signs of atropine toxicity begin to appear. Pediatric, IM, IV, initial: 1 mg; then, 0.5-1 mg q 5-10 min until muscarinic symptoms disappear and signs of atropine toxicity appear.

Treatment of mushroom poisoning due to muscarine.

Adults, IM, IV: 1-2 mg q hr until respiratory effects decrease.

Treatment of organophosphate poisoning.

Adults, IM, IV, initial: 1-2 mg; then, repeat in 20-30 min (as soon as cyanosis has disappeared). Dosage may be continued for up to 2 days until symptoms improve.

Arrhythmias.

Pediatric, IV: 0.01-0.03 mg/kg.

Prophylaxis of respiratory tract secretions, excessive salivation, succinylcholine- or surgical procedure-induced arrhythmias.

Pediatric, up to 3 kg, SC: 0.1 mg; 7-9 kg: 0.2 mg; 12-16 kg: 0.3 mg; 20-27 kg: 0.4 mg; 32 kg: 0.5 mg; 41 kg: 0.6 mg.

•**Ophthalmic Solution Uveitis.**

Adults: 1-2 gtt instilled into the eye(s) up to q.i.d. Children: 1-2 gtt of the 0.5% solution into the eye(s) up to t.i.d.

Refraction.

Adults: 1-2 gtt of the 1% solution into the eye(s) 1 hr before refracting. Children: 1-2 gtt of the 0.5% solution into the eye(s) b.i.d. for 1-3 days before refraction.

•**Ophthalmic Ointment**

Instill a small amount into the conjunctival sac up to t.i.d.

END OF INFORMATION – NOTHING FOLLOWS